

PATHOLOGY AND TREATMENT OF EPILEPSY. William H. Thompson (N. Y. Med. Jour., Nov. 8, 1902).

Epilepsy cannot be defined as a convulsive disease, for convulsions are at most only occasional effects, not inherent adjuncts to epilepsy. Nor can it be defined as a cerebral disorder producing loss of consciousness, for even that is not invariable. Aphasia alone may be the only symptom. The fact of epilepsy does not depend at all on the number or on the variety of the symptoms, but solely on the question whether the symptoms are epileptic or not. Epilepsy is a specific disease *sui generis* protean in its manifestations. The first and simplest symptom is part of the epileptic process as much as the latest and most violent symptom. The never varying element in epilepsy is suddenness. Epilepsy is the only sudden disease. The first law of the physiology of the nervous system is that the beginning of every nervous action is always on the afferent side. A spontaneous, *i.e.*, a primary motor efferent discharge is unknown in physiology. Why should it occur in epilepsy? It is by the constant repetition of the same recurring excitation that certain groups of neurones become disciplined to react uniformly to a certain definite afferent excitation. This implies the establishment of a definite inhibition. Inhibition is solely the resistance begotten by habit to any irregular efferent response. Epilepsy is a disease characterized by a sudden derangement of the normal regulative inhibition existing between cortical nerve centers, induced in the first instance by an abnormal excitation. This shifts the primary seat of epilepsy from the motor efferent to the sensory or afferent portions of the nervous structure. As regards treatment therefore all epilepsies should be regarded as caused by some source of abnormal afferent excitation. Such a cause may be intracranial focus of irritation following injury to the head, venous thrombosis in the meninges, following typhoid or scarlet fever, or sunstroke, and a long continued dosing of one-twenty-fifth of a grain of mercury biniodide, *t.i.d.*, and the application to the nape of the neck of bromide ointment is advisable.

Irritation of the nose, tracts of respiration or deglutition are frequent causes of epilepsy, and can be treated. Over excitability of the throat leading to bolting of food may be treated by application to the whole pharynx of nitrate of silver, ten grains to the ounce, followed later by tincture of iodine. To prevent bromism in cases needing continued bromide, give cod liver oil and phosphorus, or reinforce and reduce the bromid by coal tar drugs, such as antipyrin. Auto-intoxication and toxemia in some form, whether alcoholic, uremic, are the commonest causes. Open air treatment is as much indicated in epilepsy as in tuberculosis. The writer claims a cure in 70 per cent. of the cases of epilepsy.

W. B. NOYES.

ALCOHOLIC EPILEPSY. T. D. Crothers (Journal American Medical Association, Dec. 13, 1902).

The writer emphasizes the following facts: (1.) Alcoholic epilepsy is increasing rapidly in this country. (2.) It is a psychosis and neurosis which should be recognized, having distinct symptoms, the recognition of which is imperative in the treatment. (3.) When the toxic symptoms are convulsive and explosive and come on suddenly, the future of the case is very ominous and the warnings from these symptoms should be heeded. (4.) The connection between mixed drinks and these spasmodic symptoms is traceable and should be considered in the prognosis and treatment.

The cases are classified as follows: (1) The convulsive and maniacal types; (2) the demented and confused form; (3) the trance automatic and psychic classes. In the first, intoxication of a sudden

maniacal type is followed by muscular explosions of extraordinary character. These attacks are followed by profuse stupor and often convulsive twitchings of the voluntary muscles.

In the states of dementia and confusion epileptic symptoms are prominent. The writer believes that the convulsive trembling and unconsciousness point to epilepsy which may be the cause instead of the effect. In the class of automatic trance and psychic cases certain blanks of memory occur, followed by automatic acts which the person never remembers. Narcotism by alcoholism or epileptoid symptoms may be found. Besides these there may be sudden alterations of personality and conduct and automatic trances. Thus a moderate drinker may perform some act of which he is unconscious and in an epileptoid state which may be regarded unusual or insane.

W. B. NOYES.

EPILEPSY: ITS TREATMENT. Daniel R. Brower (Journal of the American Medical Association, Jan. 17, 1903).

Hygiene of the epileptic. This should be disciplinary, pedagogic, and dietetic. All stimulating narcotics should be eschewed. Differential care for the dullards and the over-bright should be carried out. The diet should tend to minimize nitrogenous food, permitting meat once a day, excluding all indigestible foods, and cutting down fat and sugar.

Drugs. If bromides are used, vary their administration by changing the vehicle. For children the dose is a grain for each year of their life, not exceeding 20 grains three times a day of bromide of sodium for an adult. If this fails add fluid extract of *Solanum Carolinensis*, beginning with a halfteaspoonful, increasing to two. In cases of cardiac enfeeblement the fluid extract of *Adonis vernalis*, in dose of from a half to five minims may be added. Coal tar drugs may be used, or belladonna. For the anemic cases bromide of iron may be used.

If irritability of the bladder ensues, bromohydric acid or bromipin may be used. If the bromide treatment fails borax in ten grain doses. Oxide of zinc in doses of three to five grains, or strychnine may be of service. Santonin in increasing doses may be used. Combinations of salicylate of soda and antipyrin may be used if bromides disagree. Nitroglycerine in certain cases is helpful.

W. B. NOYES.

PATHOLOGY OF TABES. L. Nageotte. (Presse Médicale, Dec. 10, 1902, No. 49).

Tabes, the author says, is an inflammatory disease which attacks a certain group of sensory and motor nerve roots as they emerge from the sub-arachnoid space. The process is allied to a syphilitic meningitis. The lesion is not solely a syphilitic one, but there is an interstitial transverse neuritis of the nerve root that has traveled up from the meninges and involved the interfascicular connective tissue. The posterior nerve roots are first involved and then the posterior columns throughout. The shorter fibers seemed to suffer more than the long ones. There is a progressive atrophic change in each fiber with thinning of the myelin sheath. Later the myelin disappears, the axis cylinder persisting.

JELLIFFE.

MESSAGE FOR TABETICS. M. G. Constantoux (La Presse Médicale, Dec. 6, 1902).

The author arrives at the following conclusions: (1) The employment of massage for tabes should be especially adapted for each particular case. (2) Massage though given with greatest care, and helpful in certain cases may be harmful to other cases. (3) It should be applied either by a physician acquainted with tabes, or by a masseur absolutely obedient to instructions. (4) Massage for tabes is indicated as follows; (a) for a gen-